

AMENDMENT UNDER 37 C.F.R. § 1.111
Application No.: 10/806,452
Atty Docket No.: Q76445

REMARKS

The Office Action of February 17, 2005 has been received and its contents carefully considered.

Claims 1 to 16 are all the claims pending in the application, prior to the present amendment.

The Examiner objects to the disclosure at page 40, line 3. The Examiner states that "Surfinols" should be changed to--SURFYNOLS--. Applicants believe the Examiner intended to refer to page 49 of the specification, and not page 40 which does not contain the word "Surfinols". Applicants have amended the specification at page 49 to change "Surfinols" to -- SURFYNOLS--.

The Examiner states that "-CO₂-" should be added to the specification at page 71 to provide antecedent basis for the "-CO₂-" in claim 11.

In response, applicants point out that the term "-CO₂-" appears at numerous locations in the specification which provide basis for the "-CO₂-" recitation in claim 11. See, for example, Compound 110 in Table 3; Compound 130 in Table 6; Compound 140 in Table 8; Compounds 169 and 170 in Table 11; Compound 171 in Table 12 where m is 3; Compounds 172 to 174 and 178 in Table 12 where n is 1 or 2; Compound 188 in Table 13 where m is 3; and Compounds 187 and 188 in Table 13 where n is 1. In addition, applicants refer the Examiner to the disclosure at page 71, lines 3 to 5, which recites an oxy group -O-, a carbonyl group -CO-, and "a group formed by combining them". Applicants submit that a group formed by combining them includes a -CO₂- group.

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Accordingly, applicants submit that the specification provides support for the "-CO₂" recitation in claim 11, and that there is not any need to amend the specification.

The Examiner identifies a number of grammatical and typographical errors in claims 1, 6 and 14. Applicants have amended these claims in the manner proposed by the Examiner.

Claims 1-16 have been rejected under the first paragraph of 35 U.S.C. § 112 as being based on a specification which is non-enabling for the claimed subject matter.

The Examiner argues that the specification only provides enablement for the use of an ink which contains water, a water-soluble organic solvent, a dye, a betaine compound and a non-ionic surfactant. The Examiner suggests the incorporation of claim 2, which recites a non-ionic surfactant, into claim 1 to overcome this rejection.

In response, applicants have amended claim 1 in the manner proposed by the Examiner have canceled claim 2, and have amended the dependency of remaining claims where appropriate.

Claims 6, 12, 13, 15 and 16 have been rejected under the second paragraph of 35 U.S.C. § 112, as indefinite.

The Examiner sets forth a number of reasons for this rejection. Applicants discuss each reason below.

(a) With respect to claim 6, the Examiner states that the phrase "wherein the cationic site selected from the group consisting of an amine form nitrogen atom" is indefinite. The Examiner states it is unclear where the amine atom comes from. The Examiner refers to page 7,

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line 4 of the specification. The Examiner states that she assumes applicants intended the amine atom to come from a nitrogen atom in a specific group.

In response, applicants have amended the term "an amine form nitrogen atom" to --an aminic nitrogen atom--. This phrase indicates that what is being referred to is a nitrogen atom in an amine group. This is what is shown in the description in the specification of the specific compounds that can be used.

Applicants have also amended claim 6 to state that it is the betaine that has a cationic site and an anionic site.

(b) The Examiner states that claims 12 and 15 are indefinite because it is unclear as to exactly what the ink set contains. The Examiner asks whether claims 12 and 15 are describing the ink of claims 2 and 14, respectively, or at least one of those inks. The Examiner states that she assumes applicants intended the ink set to contain the inks of claim 2 and 14, respectively, as one of the inks in the ink set, and that she examined the claims according to this understanding.

In response, applicants point out that claim 12 is stating that the ink set of claim 12 contains at least one ink, now according to claim 1. Similarly, claim 15 is stating that the ink set of claim 15 contains at least one ink according to claim 14. Applicants have amended claims 12 and 15 as set forth above to clarify these claims.

(c) The Examiner states that claims 13 and 16 are confusing because they depend from two different claims.

With respect to claim 13, the Examiner suggests replacing the phrase "by using at least one of the ink according to claim 2 and the ink set according to claim 12" with the phrase --

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comprising the ink according to claim 1" and adding a new claim with the language "an ink jet recording method wherein an image is recorded with an ink jet printer comprising the ink set according to claim 12". The Examiner states that similar amendments should be made with respect to claim 16.

Applicants agree with the Examiner that claims 13 and 16 are improper multiple dependent claims. Applicants have amended claims 13 and 16 as set forth above to respond to this rejection. Applicants have amended claims 13 and 16 to remove the reference to two claims.

(d) With respect to claims 14 and 16, applicants have amended these claims to clarify them by deleting the phrase "and one other betaine compound" and to recite that the ink contains at least two different betaine compounds.

In Paragraphs 9 to 14 of the Office Action, the Examiner sets forth six separate rejections of the claims based on obviousness-type double patenting as being unpatentable over the claims of six different copending applications. The six different applications, with their published patent application numbers in parentheses, are as follows: 10/611,990 (US 2004/0055508), 10/807,442 (US 2004/0200385), 10/805,251 (US 2005/0001890), 10/600,831 (US 2004/0011248), 10/660,653 (US 2004/0080595) and 10/806,424 (US 2004/0194660)

In response, applicants enclose herewith a Submission of Terminal Disclaimer together with a Terminal Disclaimer with respect to each of the cited copending applications and the appropriate fee.

In view of the above, applicants request withdrawal of the double patenting rejections.

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Claims 1-10 and 12-14 have been under 35 U.S.C. § 102(a) as anticipated by EP 1378550.

In addition, claims 1-10 and 12-16 have been rejected under 35 U.S.C. § 102(a) as anticipated by EP 1375608.

Further, claims 1-13 have been rejected under 35 U.S.C. § 102(a) as anticipated by EP 1473336.

EP '550 was published on January 7, 2004, which is after the filing date of applicants' Japanese priority applications JP 2003-080677 and JP 2003-08028, each of which were filed in Japan on March 24, 2003. Similarly, EP' 608 was published on January 2, 2004 and EP '336 was published on November 3, 2004. Each of these publication dates are after applicants' priority date of March 24, 2003. Accordingly, applicants respond to these rejections by submitting a verified translation of both of their priority documents. One or both of the priority documents support each of the present claims.

In view of the submission of the priority documents, applicants request withdrawal of these rejections.

Claims 1, 3, 5 and 6 have been rejected under 35 U.S.C. § 102(b) as anticipated by Gundlach et al.

In response, applicants have amended claim 1 to incorporate the subject matter of claim 2 into claim 1, since claim 2 has not been rejected based on Gundlach et al.

In view of this amendment, applicants request withdrawal of this rejection.

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Claims 1 to 9, 11 and 13 to 16 have been rejected under 35 U.S.C. § 102(b) as anticipated by Hiraoka et al.

In response, applicants have amended claim 1 to incorporate the subject matter of claim 10, since claim 10 has not been rejected based on Hiraoka et al.

In view of this amendment, applicants request withdrawal of this rejection.

Claims 1 and 12-14 have been rejected under 35 U.S.C. § 102(e) as anticipated by the published patent application US 2004/0055508 to Miyamoto et al, which corresponds to the copending application that the Examiner employed in the double patenting rejection in Paragraph 9 of the Office Action. Miyamoto et al '508 also corresponds to EP '550 that the Examiner employed above.

Further, claims 1-10 and 12 and 13 have been rejected under 35 U.S.C. § 102(e) as anticipated by published patent application US 2004/0011248 to Taguchi et al, which corresponds to the copending application that the Examiner employed for the double patenting rejection in Paragraph 12 above. Taguchi et al '248 also corresponds to EP '608 that the Examiner employed above.

In addition, claims 1-13 have been rejected under 35 U.S.C. § 102(e) as being anticipated by US published patent application 2004/0080595 to Taguchi et al, which corresponds to the copending application employed in the double patenting rejection in Paragraph 13 of the Office Action.

Each of these published patent applications has an effective date that is later than applicants' priority date. Since applicants are submitting herewith verified translations of

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applicants' priority documents, which fully support the present claims, applicants request withdrawal of these rejections.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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Date: July 18, 2005